CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No.10/KRIDL/CEMENT/2014-15

Date: 04.07.2014

TEST REPORT

CLIENT	:	**Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
AGENCY	:	**Technical Manager,** KRIDL, Bangalore.
NAME OF THE WORK	:	Improvements to roads and drains at Ramachandrapura old village, Hanuman layout, Anjaneya temple & Sathyanarayana temple surroundings in Ward No.10, BBMP, Bangalore.
REFERENCE	:	EE/BTP/KRIDL/W.O/467/2013-14 Dated: 21.02.2014
SAMPLE ID	:	CEMENT
SAMPLES SUPPLIED BY	:	AGENCY

The results of the tests conducted on the cement sample are as follows:

Sl.No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 1989-2013
1	Standard Consistency	IS-4031 (Part -4)	31.00 %	-
2	a) Initial Setting Time	IS-4031 (Part -5)	165 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5)	490 Minutes	Not More than 600 Minutes
3	Soundness by the Le-Chatelier method	IS-4031 (Part 3)	1 mm	Not more than 10 mm

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Job No.: CTCE/BBMP/W.No.10/KRIDL/SAND/2014-15 : 04.07.2014

TEST REPORT ON FINE AGGREGATES
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of Work : Improvements to roads and drains at Ramachandrapura old village, Hanuman layout, Anjaneya temple & Sathyanarayana temple surroundings in Ward No.10, BBMP, Bangalore.

Reference : EE/BTP/KRIDL/W.O/467/2013-14 Dated: 21.02.2014

Date of Testing : 04.07.2014

Material : Sand Total Wt. of Aggregates in gms **1000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits For Zone-II
10	0	0	0	100	100
4.75	63	6.30	6.30	93.7	90-100
2.36	180	18.00	24.30	75.7	75-100
1.18	200	20.00	44.30	55.7	55-90
600 Micron	185	18.50	62.80	37.2	35-59
300 Micron	155	15.50	78.30	21.7	8-30
150 Micron	165	16.50	94.80	5.2	0-10

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Job No.: CTCE/BBMP/W.No.10/KRIDL/AGG/2014-15 : 04.07.2014

TEST REPORT ON COARSE AGGREGATES
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of Work : Improvements to roads and drains at Ramachandrapura old village, Hanuman layout, Anjaneya temple & Sathyanarayana temple surroundings in Ward No.10, BBMP, Bangalore.

Reference : EE/BTP/KRIDL/W.O/467/2013-14 Dated: 21.02.2014

Date of Testing : 04.07.2014

Material : 40mm Aggregates

Total Wt. of Aggregates in gms **10000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
80	0	0	0	100	100
40	305	3.05	3.05	96.95	95-100
20	5840	58.40	61.45	38.55	30-70
10	2250	22.50	83.95	16.05	10-35
4.75	1300	13.00	96.95	3.05	

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Job No.: CTCE/BBMP/W.No.10/KRIDL/CUBE/2014-15

05.08.2014

TEST REPORT ON CONCRETE CUBES

Client : **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of the work : Improvements to roads and drains at Ramachandrapura old village, Hanuman layout, Anjaneya temple & Sathyanarayana temple surroundings in Ward No.10, BBMP, Bangalore.

Reference : EE/BTP/KRIDL/W.O/467/2013-14 Dated: 21.02.2014

Sample ID : Road Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	08.07.2014	05.08.2014	8.135	475.5	21.13
2	08.07.2014	05.08.2014	8.256	496.3	22.06
3	08.07.2014	05.08.2014	8.334	520.3	23.12

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07.08.2014

TEST REPORT ON CONCRETE CUBES

Client : **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of the work : Improvements to roads and drains at Ramachandrapura old village, Hanuman layout, Anjaneya temple & Sathyanarayana temple surroundings in Ward No.10, BBMP, Bangalore.

Reference : EE/BTP/KRIDL/W.O/467/2013-14 Dated: 21.02.2014

Sample ID : Road Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	10.07.2014	07.08.2014	8.198	479.3	21.30
2	10.07.2014	07.08.2014	8.233	502.3	22.32
3	10.07.2014	07.08.2014	8.385	519.3	23.08

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09.08.2014

TEST REPORT ON CONCRETE CUBES

Client : **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of the work : Improvements to roads and drains at Ramachandrapura old village, Hanuman layout, Anjaneya temple & Sathyanarayana temple surroundings in Ward No.10, BBMP, Bangalore.

Reference : EE/BTP/KRIDL/W.O/467/2013-14 Dated: 21.02.2014

Sample ID : Road Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	12.07.2014	09.08.2014	8.185	476.3	21.17
2	12.07.2014	09.08.2014	8.289	502.2	22.32
3	12.07.2014	09.08.2014	8.320	519.3	23.08

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TEST REPORT ON CONCRETE CUBES

Client	: **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
Agency	: **Technical Manager,** KRIDL, Bangalore.
Name of the work	: Improvements to roads and drains at Ramachandrapura old village, Hanuman layout, Anjaneya temple & Sathyanarayana temple surroundings in Ward No.10, BBMP, Bangalore.
Reference	: EE/BTP/KRIDL/W.O/467/2013-14 Dated: 21.02.2014
Sample ID	: Road Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	15.07.2014	12.08.2014	8.135	486.3	21.61
2	15.07.2014	12.08.2014	8.290	499.8	22.21
3	15.07.2014	12.08.2014	8.342	520.6	23.14

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TEST REPORT ON CONCRETE CUBES

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Name of the work	: Improvements to roads and drains at Ramachandrapura old village, Hanuman layout, Anjaneya temple & Sathyanarayana temple surroundings in Ward No.10, BBMP, Bangalore.
Reference	: EE/BTP/KRIDL/W.O/467/2013-14 Dated: 21.02.2014
Sample ID	: Road Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	17.07.2014	14.08.2014	8.150	475.9	21.15
2	17.07.2014	14.08.2014	8.280	502.3	22.32
3	17.07.2014	14.08.2014	8.337	519.6	23.09

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